Soybean Aphids Found in Ontario Fields

Management Article

By Tracey Baute

Soybean aphids have been found in soybeans in various locations in southern Ontario ranging from Windsor to north of Fergus so far. Reports started to come in later last week which coincides with news already coming in from several US states including the bordering states of Michigan, Ohio and NY.

Scattered pockets of 2 -50 aphids per plant on a few plants in each field is what is being observed right now. This is normal, as a few winged aphids will land in a soybean field to start a colony on a couple of plants. These aphid colonies will get crowded on these small plants, will develop wings and spread themselves out in that field or nearby fields.

These reports are not early for Ontario. We found soybean aphids in fields in the first week of June in past years. So, having them overwintering on buckthorn may have not started us off earlier, though it may have allowed for more winged adults to take flight and start colonies in our fields. What is interesting is that reports are scattered throughout southern Ontario, from known buckthorn areas but also areas where there is no buckthorn, like Essex, Kent and Lambton. This indicates that some were still blown in from elsewhere, whether from Michigan or Ohio or from a rotating system above us that has picked them up from Central or Eastern Ontario or NY and dropped them down into the far south.

It is important not to panic and start spraying now. We are no where near thresholds yet. And not every field has been colonized yet. The action threshold agreed upon by Ontario, Quebec and the US is again, "250 aphids per plant with increasing populations" when observed on 90% of the plants in a field. Research done over the past 4 years, which included a lot of Ontario data has proven economic benefits when the insecticide application takes place during the R1 (early flowering) to R5

(beginning seed) stage of soybeans. Last year it was set up to the R4 stage but Ontario data from 2004 proved that an application in the later R stage of soybeans when aphids are at or above thresholds does result in yield gain. By 250 aphids per plant and above, we no longer feel that the natural enemies are able to keep up with the rapid population growth of the aphids.

Some people are getting antsy and want to throw in some insecticide with their glyphosate application in the next few weeks. Tankmixing with a herbicide has not been shown to be effective, as the nozzle, pressure and water volume set up for spraying weeds is very different from spraying aphids. And you are targeting the weed, not the crop where the aphids are hiding on the underside of the leaves. And if insecticide sprays are done before thresholds are reached, the natural enemies are killed off, which allow the aphids to rebound and increase the populations. Spraying early in the season increases your risk of having to spray again once the beans are in the R stages. So pay more attention to those weeds right since they are the main concern at this stage.

It is all up to the weather and the natural enemies now. I have already noticed various types of ladybugs (especially native ones) and natural enemies feeding on these aphids which are very good at keeping down these initial colonies. The best advice right now is to get out and scout your fields! Get an idea of what is going on. This will give you a heads up as to whether they are in your field, so that you know from week to week how they are developing and when they are finally nearing thresholds.

We will be keeping you up to date on what is going on across the province in the CropPest. We will also have a strip trial protocol and management guidelines made available on the OMAF and the Ontario Soybean Growers websites. Keep an eye out too for our "coming soon" realtime map which will indicate our soybean scouting progress throughout the season so that you have an idea what aphid populations are doing in your area. Again, don't rely on what others are seeing in your area to know when to spray. Going out into your own fields is very important, as side by side fields can have very different aphid populations.

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